

Date: Thursday, 11/9/2006 4:38:04 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: BRACKET ASSEMBLY		
Job Number	: 29397					
Estimate Number	: 10278					
P.O. Number	: N/A			Part Number	: D3121141	
This Issue	: 11/9/2006		S.O. No.	: N/A		
Prsht Rev.	: NC			Drawing Number	: D3121 REV D	
First Issue	: N/A		Type	: MACHINED PARTS		
Previous Run	: 28825			Project Number	: N/A	
Written By	: <i>[Signature]</i>			Drawing Revision	: D	
Checked & Approved By	: <i>[Signature]</i>			Material	: N/A	
Comment	: Est Rev: Pick:A 04.02.18 New issue KJ/DS			Due Date	: 12/10/2006	
				Qty:	24	Um: Each

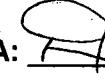
Additional Product

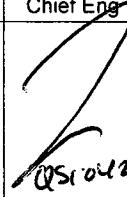
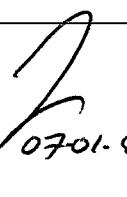
Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M174B1000X02000	17-4 SS Bar	
		Comment: Qty.: 0.5775 f(s)/Unit Total : 13.8600 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.000x02.000) Identify for D3121-111 Batch: <i>M14534</i> 18 piece <i>10' / 119712 6 piece</i>	
2.0	BAND SAW	BAND SAW	
		Comment: BAND SAW Cut blanks: (1.000" x 2.000") 6.600" long	
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1	
		Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine D3121-111 as per Folio FA361 and Dwg D3121Identify as D3121-111 2-Deburr 3-Scribe batch number	
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
		Comment: INSPECT PARTS AS THEY COME OFF MACHINE	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 07/01/08
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/01/08	3	the piece pop out twice material is slightly small at the bottom causing the material to pop out of vice.	 QSI042	scrap and replace	mb 07/01/08	 07-01-08	 QSI042	 07-01-08

NOTE: Date & initial all entries

Date: Thursday, 11/9/2006 4:38:04 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 29397

Part Number: D3121141

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

J.L 07/01/08 24

6.0 D312121 Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3121-21	Bolt	<u>B29828</u>

mk 07/01/08 24

7.0 D3121241 Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 24.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3121-241	Bearing Ass.	<u>B29829</u>

mk 07/01/08 24

8.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-141 as per Dwg D3121.

SA 07.01.05/2008 07/01/08 24

9.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/01/08 24

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ~~SH 408~~ 07/01/08 24

CB 07/01/08 24 07/01/08

11.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

07/01/08 24

Job Completion



07/01/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	29397
Description: Bracket		Part Number:	D3121-111
Inspection Dwg: D3121	Rev: D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000	Ø-392	/			
0.75	+/-0.030	-750	/			
0.375	+/-0.010	375	/			
2.14	+/-0.030	2.140	/			
0.950	+/-0.010	-950	/			
0.600	+/-0.010	600	/			
1.96	+/-0.030	1.962	/			
0.280	+/-0.010	279	/			
3.330	+/-0.010	3335	/			
3.630	+/-0.010	3.629	/			
R0.25	+/-0.030	R.25	/			
R0.375	+/-0.010	R.375	/			
Ø0.201	+0.005/-0.000	Ø.202	/			
0.100	+/-0.010	098	/			
6.18	+/-0.030	6.180	/			
5.89	+/-0.030	5.895	/			
0.080	+/-0.010	077	/			
0.300	+/-0.010	297	/			
30°	+/-0.1°	30°	/			
R0.25	+/-0.030	R.25	/			
0.130	+/-0.010	128	/			
0.381	+/-0.010	380	/			
0.201	+/-0.010	203	/			Typo
0.400	+/-0.010	401	/			
0.580	+/-0.010	580	/			
100°	+/-0.1°	100°	/			
0.32	+/-0.010	032	-			

Measured by:	SJ	Audited by:	J.F.	Prototype Approval:	N/A
Date:	07/01/04	Date:	07/01/05	Date:	N/A

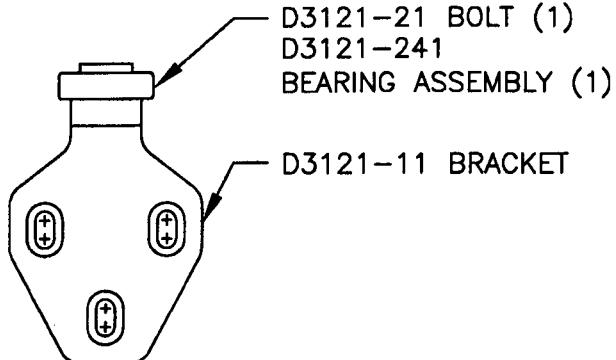
Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D3121-141	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	

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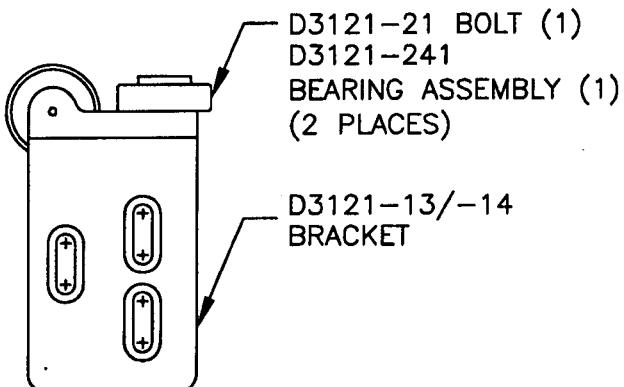
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CHECKED	APPROVED	DRAWING NO.	REV. D
		D3121	SHEET 1 OF 10
DATE	TITLE		SCALE
06.05.17	BRACKET ASSEMBLY		1:2

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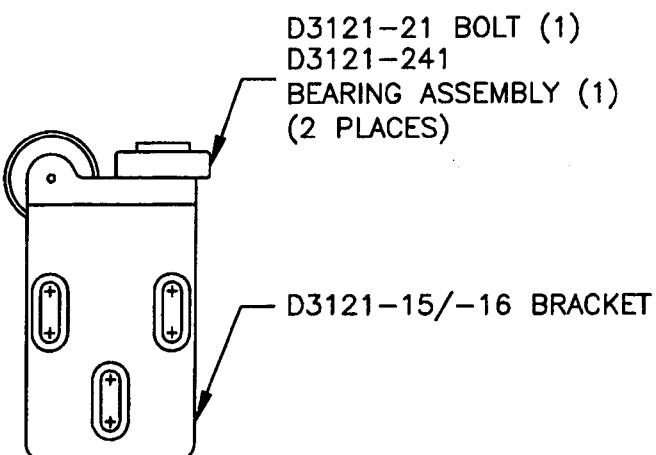
06.06.02



D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-35/-36)

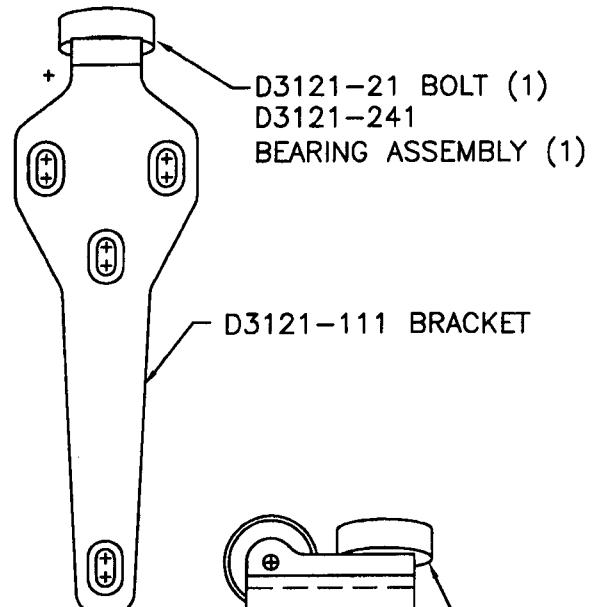
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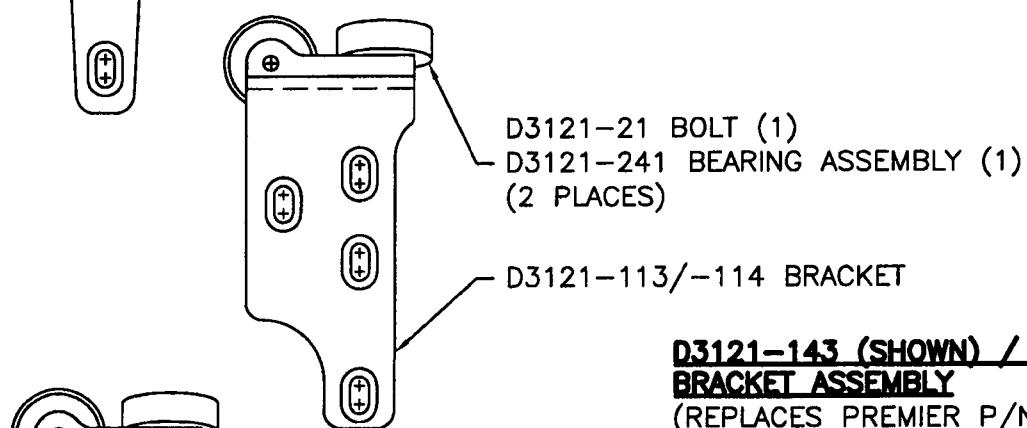
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DATE		TITLE BRACKET ASSEMBLY

REV. D
SHEET 2 OF 10
SCALE 1:2

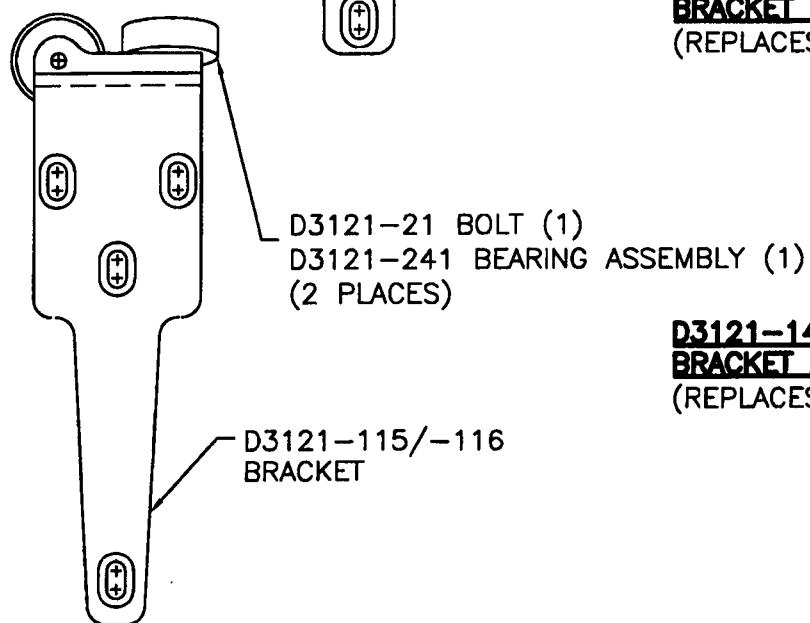
D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

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**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-03/-04)



**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-05/-06)

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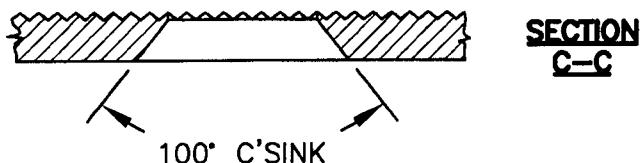
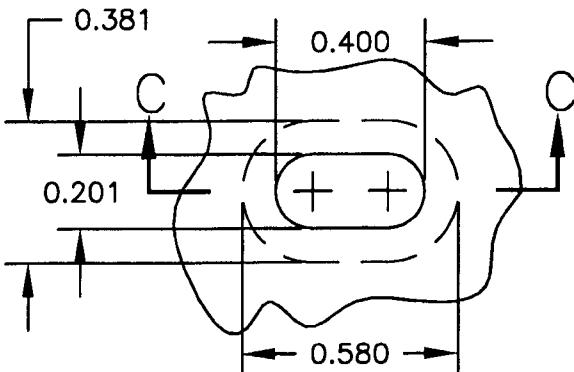
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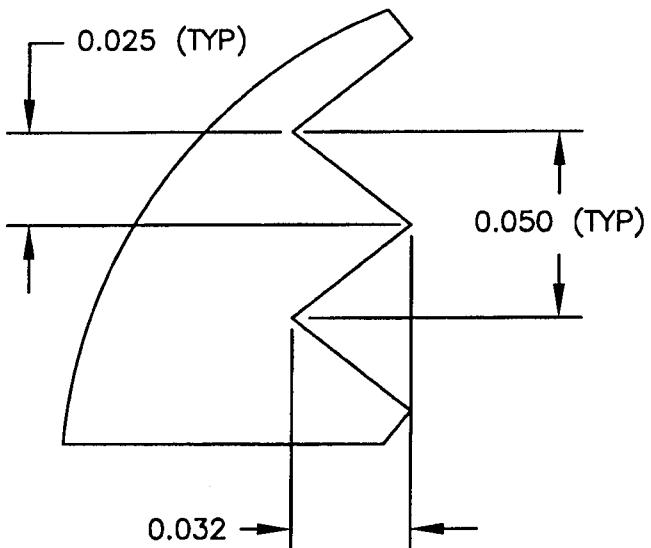
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		DRAWING NO.	SHEET 3 OF 10
DATE	06.05.17	TITLE	SCALE
		BRACKET ASSEMBLY	1:1

DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20



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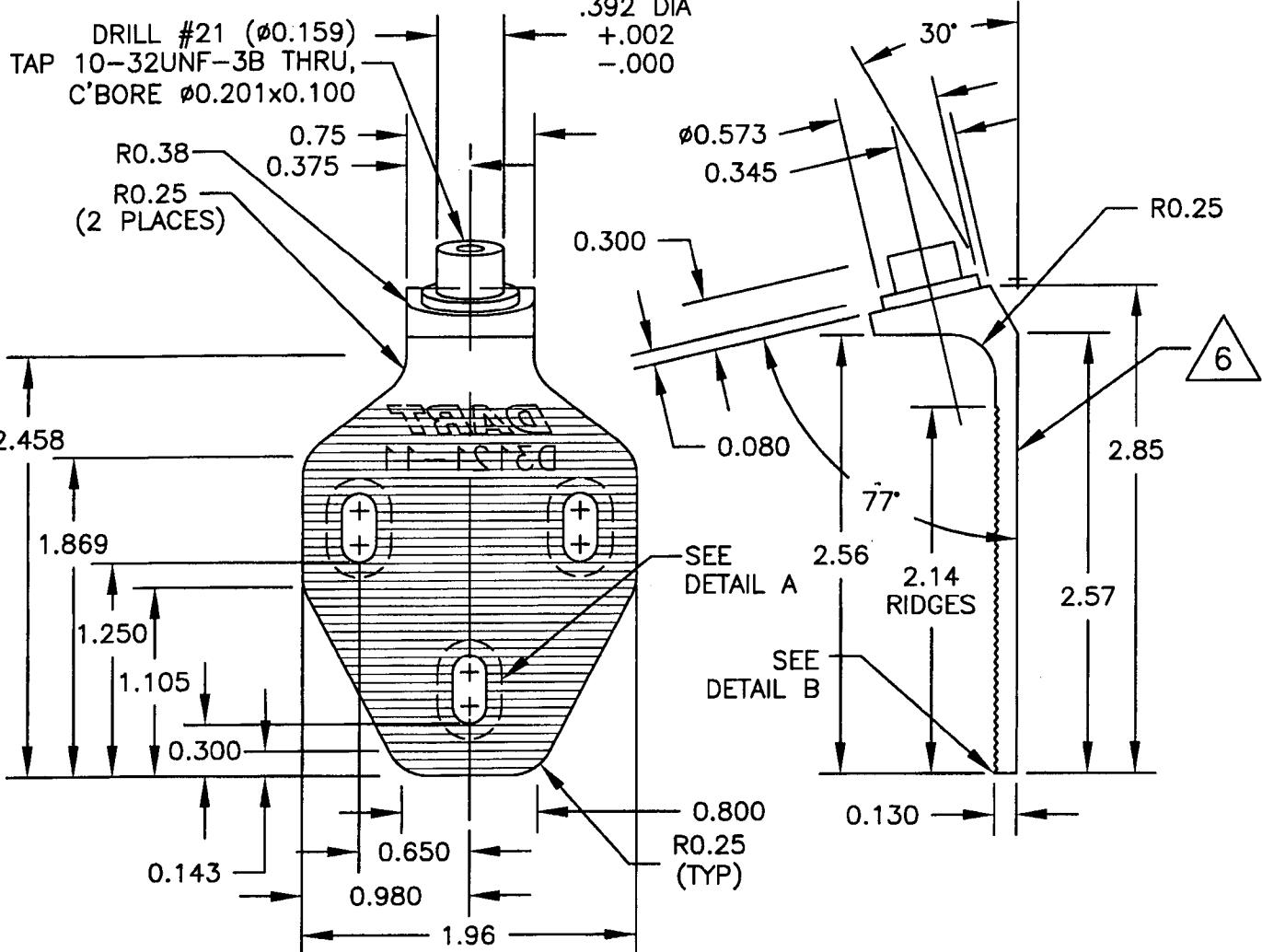
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DATE		REV. D SHEET 4 OF 10 TITLE SCALE 1:1

**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

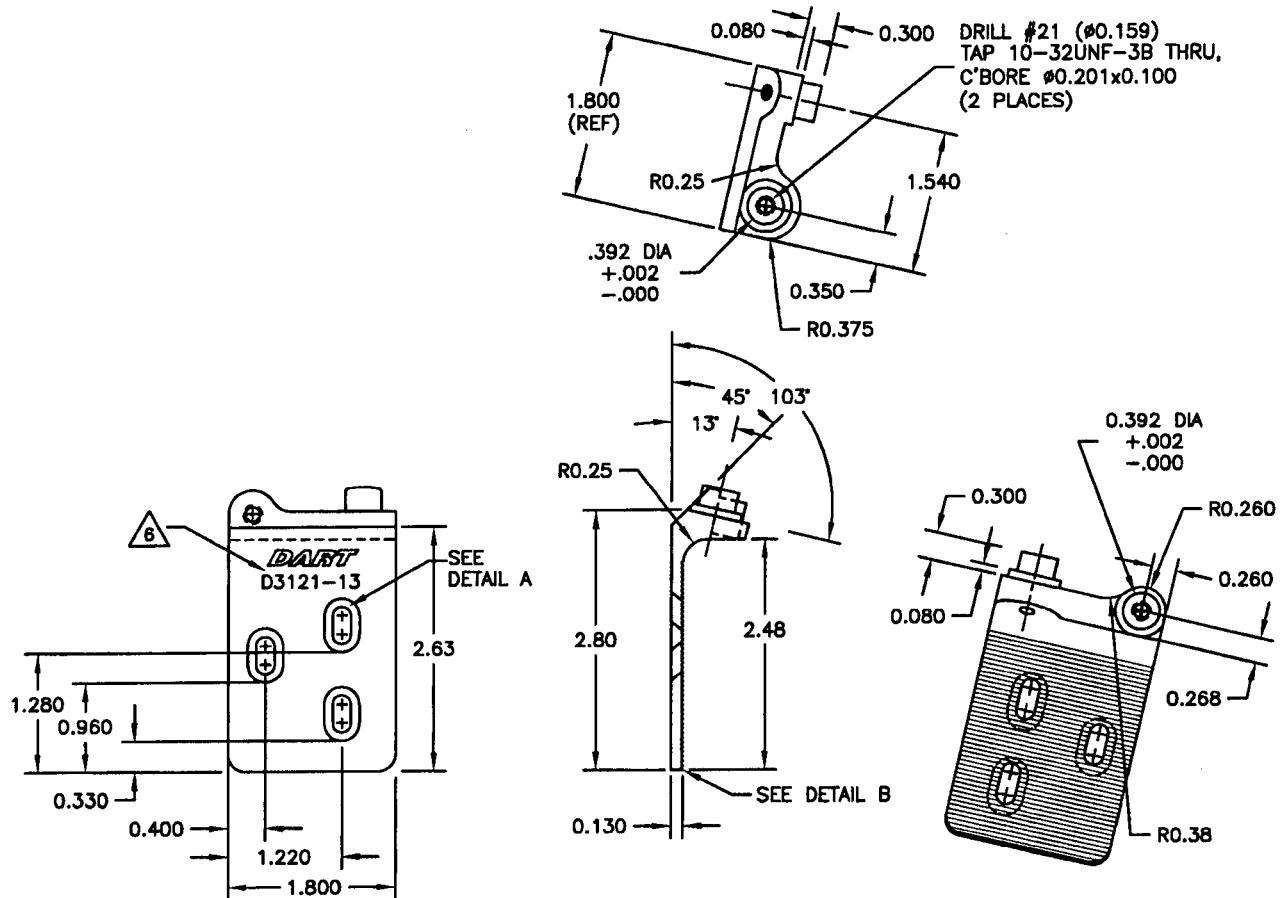
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DATE		REV. D SHEET 5 OF 10 TITLE: BRACKET ASSEMBLY SCALE: 1:2 06.05.17

**D3121-13 BRACKET (SHOWN)****D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

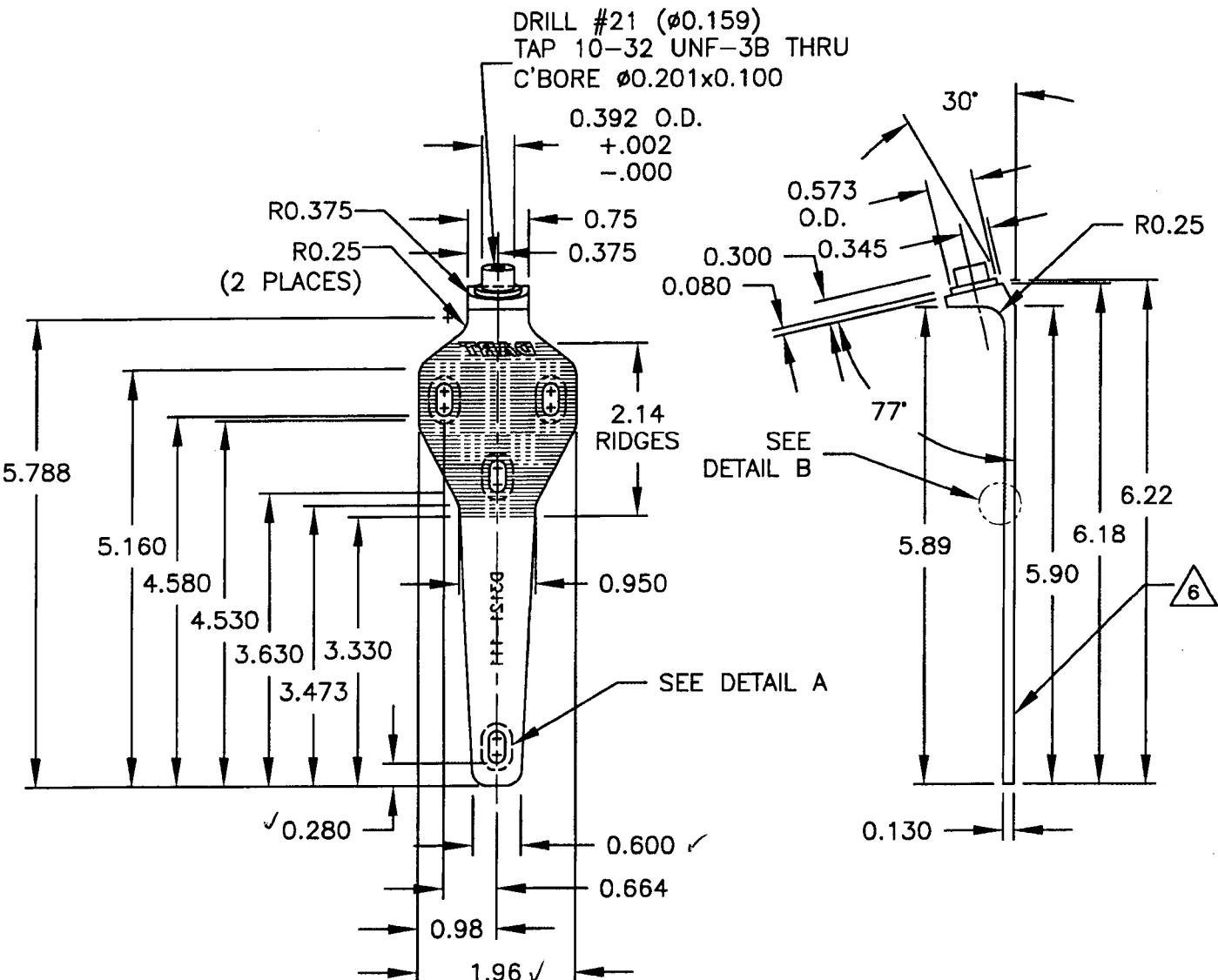
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DATE	06.05.17	REV. D SHEET 7 OF 10 TITLE SCALE 1:2 BRACKET ASSEMBLY

**D3121-111 BRACKET**

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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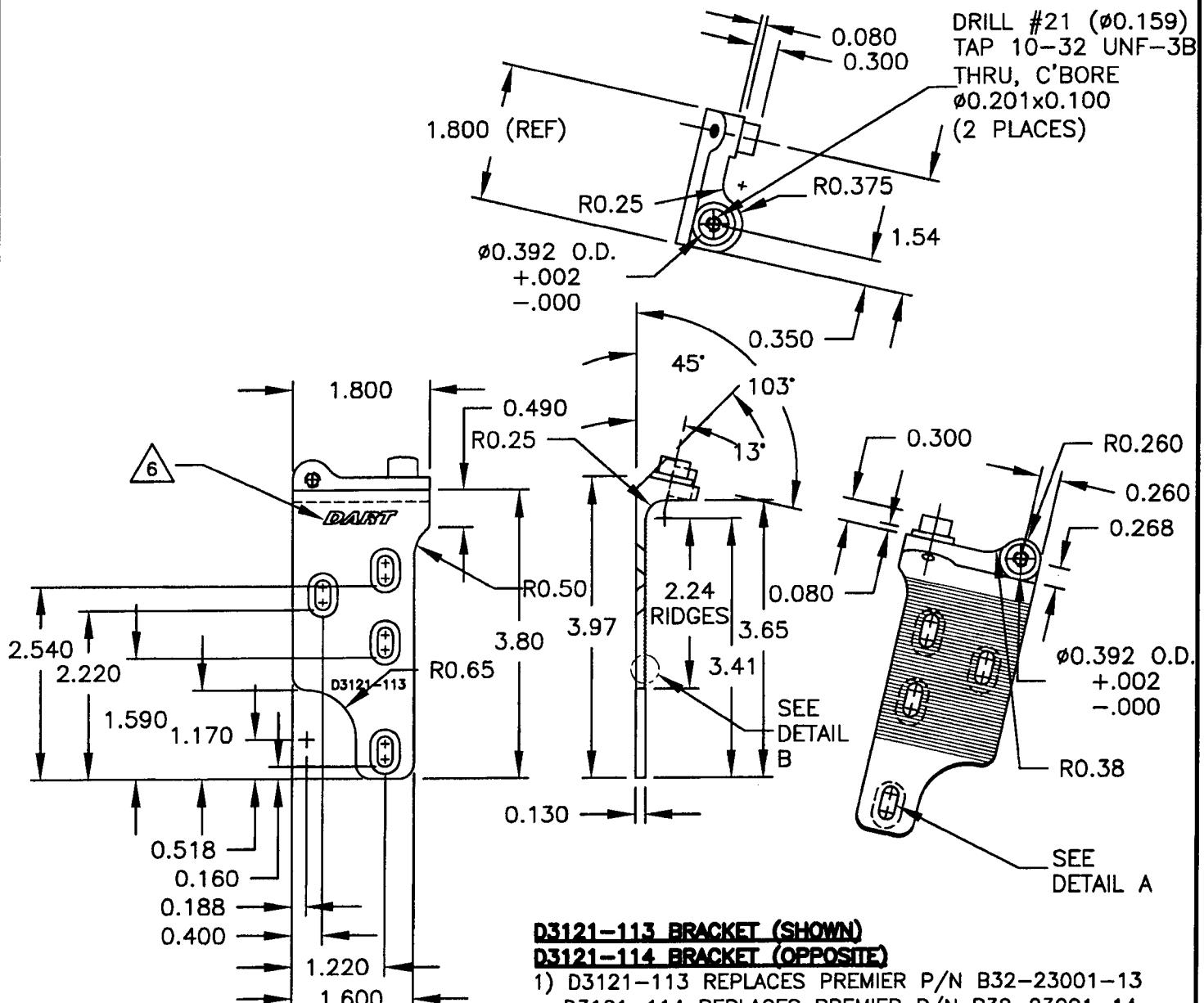
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DATE 06.05.17		TITLE BRACKET ASSEMBLY SCALE 1:2



**D3121-113 BRACKET (SHOWN)
D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ^{SHOP COPY} _{ksi}
MIN YIELD TENSILE STRENGTH = 11000 ^{RETURN TO} _{ksi}
3) TOLERANCES ARE PER DART QSI 018 UNLESS SUBJECT TO AMENDMENT
OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.015
6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005
NO. 29397

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06.06.02

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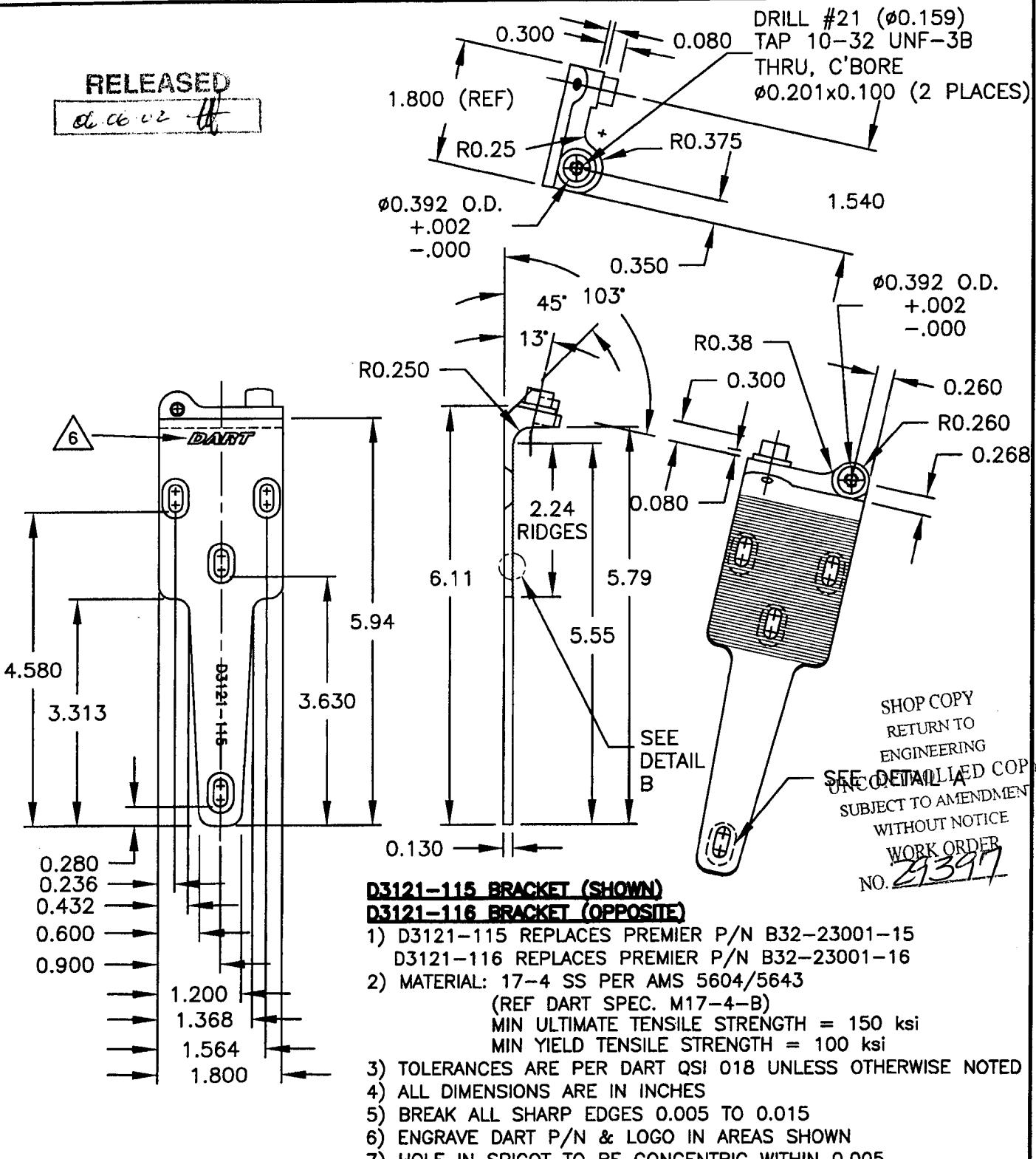
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DATE 04.02.18		TITLE BRACKET ASSEMBLY SCALE 1:2

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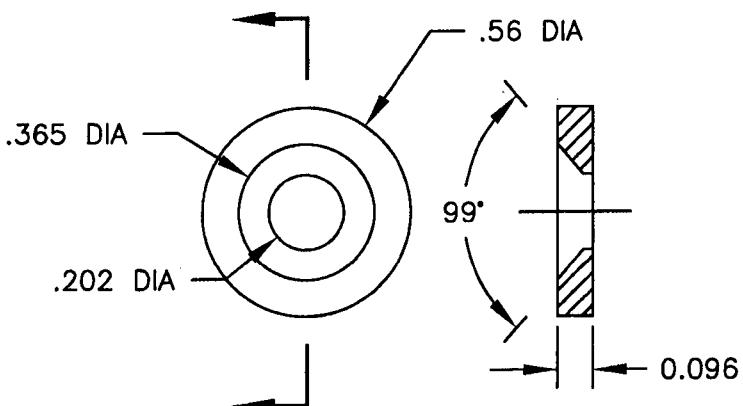
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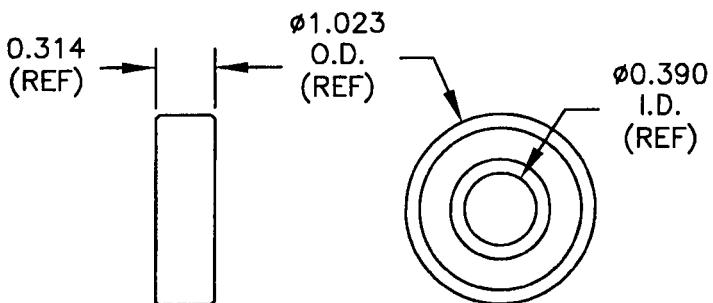
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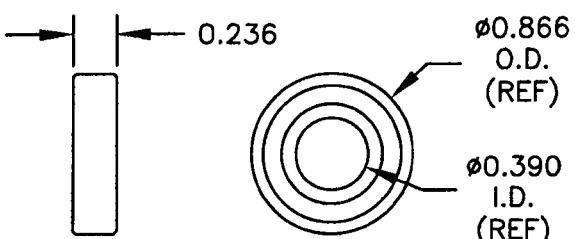
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		D3121	SHEET 10 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:1

**D3121-17 WASHER (SCALE 2:1)**

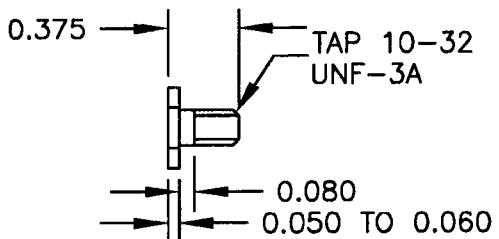
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

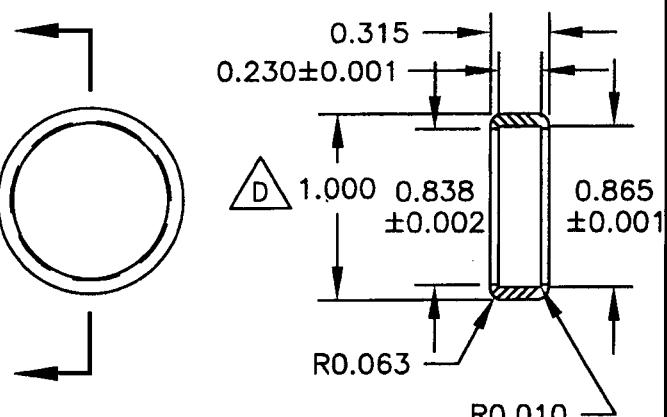
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

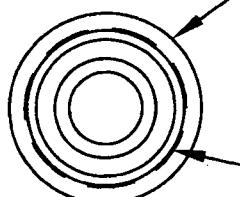
**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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MENDMENT
CAP WITHOUT NOTICE
WORK ORDER
NO. 29397



D3121-23
BEARING

D3121-241 BEARING ASSEMBLY (SCALE 1:1)